

REMARKS

The claims are 15-38 with claims 15 and 16 being independent. Claims 1-14 have been cancelled without prejudice or disclaimer. Support for claims 15-38 may be found throughout the specification. For example, support for new claims 15-25 may be found in original claims 1-14. Support for claims 15-22 also may be found in the specification at page 1, line 20 to page 2, line 2, and page 8, lines 14-21. Support for claim 26 may be found in the specification at page 3, line 4. Support for claims 27-32 may be found in the specification at page 3, line 32 to page 4, line 9. Support for claims 33-38 may be found in the specification at page 2, lines 22-27 and page 7, Example 2 and 3. No new matter has been added.

Attached hereto are copies of amended Figures 1-4, the originals of which have been provided to the Draftsperson in response to the Notice of Draftsperson's Patent Drawing Review.. These Figures have been corrected in accordance with the draftsperson's review and to remove titles and extraneous text, as indicated in the attached annotated copies of the drawings. The Specification has been amended at page 1 to insert the description of the drawings recited in the original drawings. No new matter has been added.

Although no official action has been taken regarding new claims 15-38, these claims define the same or similar subject matter and contain many of the same terms as original claims 1-10 and 14 that were examined and were the subject of the Office Action dated July 11, 2003. To expedite prosecution of the subject application, Applicants will address the objections raised in the Office Action to the extent that they pertain to the new claims. Applicants respectfully traverse the rejections in the Office Action.

The Examiner objected to the specification at page 2, line 1 for the recitation of "n X-ray powder." Applicants enclose herewith a clean copy of page 2 of the published PCT application which indicates that line 1 recites --an X-ray powder--. No correction of the specification is required.

The Examiner had objected to original claims 2-5 as being duplicates of claim 1. Applicants respectfully disagree with the Examiner's interpretation of these claims. Although each of the pending claims 17-22 are describing a polymorph, the characterization of that polymorph as set out in each of these dependent claims is different. Proof of infringement of each claim is different. Accordingly, dependent claims 17-22 are not duplicates of claim 15 or claim 16.

Claim 14 was rejected under 35 U.S.C. § 112, first paragraph, because the specification allegedly does not provide enablement for the prophylaxis of diabetes. Applicants respectfully traverse this rejection. Based upon the understanding of hyperglycemia and diabetes and the risk factors associated therewith, Applicants respectfully submit that those skilled in the art, principally physicians, can use the claimed polymorph of this invention to prevent or at least delay the onset of diabetes. (See cited U.S. Patent No. 5,478,852 and 5,708,012). However, solely to expedite prosecution of the subject application, the newly presented claims 25 and 26 are directed solely to methods of treatment..

Claims 4-5 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite for reciting the limitation of Table I and Table II, respectively. Applicants respectfully submit that claims 20 and 22 are written in accordance with M.P.E.P. 2173.05(s), which provides support for drafting claims to incorporate by reference to a specific figure or table, where, as in this case, "there is no practical way to define the invention in words and where it is more concise to incorporate by reference than duplicating a drawing or table into the claim."

The Examiner has also objected to the term "isolated" in original claim 6 as allegedly indefinite. Applicants respectfully submit that the use of the term "isolated" in the context of the present invention is well understood and commonly used in the art. A chemical definition of the term "isolated" from The American Heritage® Dictionary of the English Language: Fourth Edition. 2000, is "to separate (a substance) in pure form from a combined mixture." The Examiner questions "Isolated from what?" Applicants respectfully submit that any restriction on the term "isolated" implies that the compound is not isolated but is admixed with other compounds, solvents or materials. Accordingly, when the term "isolated" is used to describe the compound of claim 23, the term indicates that only the solid maleate polymorph is present and that no other compounds, solvents or materials are admixed therewith. Based on the doctrine of claim differentiation, this further indicates that the compound described in claim 15 or claim 16 (or any of claims 17-22) may be isolated or may be present as a mixture with other compounds, solvents or materials. Applicants respectfully submit that the term "isolated" in the context of the present invention is not indefinite.

The Examiner has also objected to the phrase "conditions associated with diabetes mellitus and certain complications thereof" in original claim 14 as allegedly indefinite. Applicants respectfully submit that these phrases are defined at page 3, lines 1-17 of the

specification. Accordingly, Applicants respectfully submit that these phrases, as recited in claim 25, are clear within the context of the subject application.

Original Claims 1-8 and 10 had been rejected under 35 U.S.C. §102(b) as allegedly anticipated by Pool et al. (WO 94/05659, hereinafter "Pool"). The Examiner contends that the claimed maleic acid salt is the same as the maleic acid salt disclosed in Pool. Applicants respectfully traverse this rejection.

It is well established that "[a]nticipation requires the presence in a single prior art reference disclosure of every element of the claimed invention." *Great Northern Corporation v. Davis Core & Pad Co., Inc.*, 228 U.S.P.Q. 356, 358 (Fed. Cir. 1986).

Applicants respectfully submit that the 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate, defined in claims 15-22 of the present invention is unique, the existence, structure and properties of which were neither described nor predicted in Pool.

As an initial matter, Applicants wish to note that the claimed invention is not directed to any maleate salt of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]-thiazolidine-2,4-dione. Applicants respectfully submit, contrary to the Examiner's assertion, that Pool does not describe the claimed maleate. In particular, Applicants wish to point out that the subject application specifically provides methods to convert the polymorph of the present invention into the polymorph described by Pool. (See the specification at page 2, lines 22-34 and page 7, Examples 2 and 3). Such methods are set out in new claims 33-38. Accordingly, the compound of Pool is not the same as the polymorph of the present invention.

Applicants respectfully submit that Pool fails to anticipate the present invention because Pool fails to describe or suggest:

- a) the form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate that provides the specified IR, Raman, NMR and X-ray spectra defined in claim 15 and claim 16,
- b) any process to prepare the 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate that provides the specified IR, Raman, NMR and X-ray spectra defined in claim 15 and claim 16, or
- c) any process to convert the 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate that provides the specified IR, Raman, NMR and X-ray spectra defined in claim 15 or claim 16 into the maleate described in Pool.

In *Bristol-Myers Co. v. U.S. International Trade Commission*, 15 USPQ 2d 1258, 1261 (Fed. Cir. 1989), the court stated that when determining the obviousness of a new chemical structure, "[t]he question is whether it would have been obvious to make the [new crystal form], based on the prior art." The Court went on to state that "[t]here must be an affirmative suggestion or teaching in the prior art whereby it would have been obvious to make the new [crystal form]; not simply the absence of obstacle." (emphasis added) *Id.* at 1262.

Assuming *arguendo*, that it would have been obvious to try to prepare 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate described in the subject application, Pool fails to describe or suggest any process to prepare a 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate that provides the spectral peaks as defined in claim 15 or claim 16. Obvious to try or experiment is not the standard under §103. Moreover, as quoted in *Bristol-Myers Co. v. U.S. International Trade Commission*, 15 USPQ 2d 1258,1261 (Fed. Cir. 1989), "[i]n factual and legal point is *In re Cofer*, 354 F.2d 664,668, 148 USPQ 268, 271 (CCPA 1966), wherein the court held that a new crystalline form of a compound would not have been obvious absent evidence that 'the prior art suggests the particular structure or form of the compound or composition as well as suitable methods of obtaining that structure or form.'" (emphasis added)

As discussed above, Pool fails to describe or suggest not only the form of 5-[4-[2-(N-methyl-N-(2-pyridyl)amino)ethoxy]benzyl]thiazolidine-2,4-dione maleate that provides the IR, Raman, NMR and/or XRPD spectral peaks as defined in claim 15 and claim 16, but Pool also fails to describe or suggest any process by which the claimed maleate could be prepared or any process to prepare the maleate of Pool from another maleate polymorph.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the subject application is in condition for allowance. If the Examiner has any remaining objections or concerns, the Examiner is respectfully requested to contact Applicants' undersigned attorney to resolve such issues and advance the case to issue.

This Amendment is being filed together with an Information Disclosure Statement. Authorization is hereby provided to charge any fees that may be required by these papers under 37 C.F.R. §1.16 or §1.17 to Deposit Account No. 19-2570.

Respectfully submitted,



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